

Small habit changes, big energy savings.

No-to-low cost energy saving tips for your business.

Typical commercial buildings waste 30% of the energy they consume, and we want to help you get that number down.

Georgia Power is committed to helping commercial customers reduce energy use and costs.



HVAC (Heating, Ventilation, Air Conditioning)



- 1. Check for air leaks** – Air leakage through the envelope of commercial buildings in the United States accounts for approximately 6% of their energy use. Walk through your facility to identify drafty areas that would benefit from sealing & caulking.

(Source: Oak Ridge National Laboratory)



- 2. Close exterior doors & windows** – Businesses may waste electricity simply by leaving the heating or air conditioning on while windows and doors are propped open. Leave signs on the door to nudge customers & employees to keep all doors and windows closed. If your building is equipped with revolving doors, encourage or require their use as opposed to swinging doors. Also, if you can see daylight under your exterior doors, you're losing cooled or heated air to the outdoors. Door sweeps attach directly to the bottom of the door to prevent air loss.



- 3. Inspect HVAC ducts** – Leaky ducts can cause the conditioned air to escape and hot air to be drawn into the duct causing fan use and conditioning to increase. Leaky ducts can reduce heating and cooling system efficiency by as much as 20%. Sealing and insulating ducts improves efficiency, lowers your energy bills, and can often pay for itself in energy savings.

(Source: ENERGY STAR®)



- 4. Clean or change air filters** – Regularly change or clean HVAC filters every month during peak cooling or heating season. Dirty filters overwork the equipment and result in lower indoor air quality.



- 5. Establish HVAC maintenance plan** – Establish a regular maintenance program to ensure comfort, efficiency, and indoor air quality. Effective maintenance can reduce HVAC energy costs by 5% to 40% depending on the system or equipment involved. A variety of HVAC components need ongoing maintenance or energy performance degradation can occur.

(Source: Building Efficiency Initiative)



- 6. Schedule annual HVAC tune up** – Set a reminder to schedule an annual HVAC tune up.



- 7. Check thermostat performance** – If your thermostats are not operating correctly throughout the season, your HVAC systems could be running more frequently than necessary, increasing your energy consumption. Perform monthly checks and, if not working properly, have them repaired or replaced.



- 8. Clean AC air conditioner coils** – Commercial HVAC units with dirty coils won't run at peak efficiency. As a result, you're drawing more amps to push the same amount of air through your system, and a higher amp draw means higher energy bills. The U.S. Department of Energy warns that "a dirty condenser coil can increase compressor energy consumption by 30%."

(Source: BFC Solutions)

HVAC (Heating, Ventilation, Air Conditioning) *(continued)*



- 9. Clear area in front of vents** – Make sure that areas in front of vents are clear of furniture and paper. As much as 25% more energy is required to distribute air if your vents are blocked.

(Source: ENERGY STAR®)



- 10. Cool and heat only where needed** – Stop heating and cooling unused areas of your building. Set the thermostats higher in the summer and lower in the winter in unused spaces than areas frequently in use.



- 11. Check seasonal thermostat settings** – In the summer, set your thermostat to 78°F when the workplace is occupied, and 85°F or off after business hours. In the winter, set your thermostat to 68°F when the workplace is occupied, and 60°- 65°F or off after business hours. You can save up to 3% for each degree the thermostat is raised in the summer or lowered in the winter. Use a locking device on your programmable thermostat to prevent others from altering the energy-saving settings. (Source: Dept of Energy & Environment)



- 12. Use ceiling fans to cool occupants** – In many circumstances, using a ceiling fan will allow you to adjust building temperatures by 4° to 8°F with no reduction in comfort to building occupants. Be sure to turn fans off in unoccupied spaces.



- 13. Use ceiling fans to reduce heating loads** – In winter, warm air rises to the ceiling where it remains and eventually leaks out of the roof, while colder air stays closer to the thermostat, causing the heating system to work harder. By circulating the indoor air with ceiling fans to create a more uniform temperature, heat loss through the roof is reduced and the temperature remains at a more comfortable level.



- 14. Plan for upcoming holidays** – Use smart thermostats to program shutdown during unoccupied hours, designated weekends, and holidays.



- 15. Use window shades** – Use shades and blinds to control direct sunlight through windows in both summer and winter to prevent or encourage solar heat gain.



Cooking



- 1. Implement a start-up/shut-down plan** – Kitchens can be a huge energy user, so when starting up equipment, don't preheat more than you need. And when things slow down after the rush, turn down or turn off equipment. Restaurants use on average 5-7 times the energy per square foot compared to other commercial buildings.



- 2. Cook efficiently with broilers**

- Cut preheat time
- Turn off unneeded sections
- Reduce idle time
- Replace missing knobs to ensure temperature setting is accurate and that equipment is off when not in use



- 3. Cook efficiently with steam cookers**

- Ensure the door is firmly shut while the steamer is operating
- Use only as many compartments as you need
- Reduce the standby time
- Ensure the steamer returns to idle when the cooking is finished
- Fix leaks and repair the steamer as soon as problems occur
- Reduce idle time by using the timer instead of "manual" mode



- 4. Cook efficiently with fryers**

- Turn off backup fryers during slow periods
- Verify that your equipment and integrated thermostat are working properly by testing with a reliable commercial thermometer
- Avoid overfilling the fryer because this only prolongs the cooking time
- Routinely change the oil filter for energy efficiency and quality food taste
- Use a fry pot cover during idle periods
- Engage low power mode idle setting during lengthy periods of fryer downtime, if available
- Keep your fryers in good operating condition by having your service agent periodically check it out



- 5. Cook efficiently with griddles**

- Reduce idle time by turning the griddle down or off during periods of slow production (most griddles take less than 15 minutes to preheat)
- Double-sided griddles should be closed when not in use to retain heat
- Calibrate the griddle controls to operate at the correct temperature
- Replace missing control knobs



- 6. Turn off holding cabinets** – Holding cabinets should be turned off when not in use, especially overnight. Consider implementing a shutdown schedule to ensure this happens every night. Save \$650 annually by turning off an un-insulated holding cabinet when the kitchen is closed (8 hours). (Source: ENERGY STAR®)

Cooking *(continued)*



7. Inspect holding cabinet door gaskets – Ensure that door gaskets and automatic door closers are maintained in good operating condition and seal properly.



8. Cook efficiently with ovens

- Turn off back-up ovens when possible
- Fully load the oven when cooking
- Inspect and replace gaskets & tighten hinges when needed
- Verify oven thermostat accuracy and recalibrate if necessary
- Use the oven window to check on cooking progress whenever possible; an oven loses approximately 20% of its heat when opened
(Source: ENERGY STAR®)



9. Cook efficiently with a commercial range

- Use a lid
- Keep burners clean
- Reduce idle time
- Replace missing knobs



10. Turn off the ventilation hood – Turn off your exhaust hood when the appliances are off, especially during non-business hours.



Lighting



1. **Maximize daylighting** – Open or close blinds to make the best use of natural daylight and take advantage of skylights or other natural daylight sources to reduce lighting during daytime hours.



2. **Turn off lights** – Turn off lights when not in use or when natural daylight is sufficient. This can reduce lighting expenses by 10% to 40%. Use task lighting where feasible.
(Source: ENERGY STAR®)



3. **Implement a lighting maintenance program** – A lighting upgrade can cut energy bills, improve the look of a facility, and boost employee morale. But all those benefits can fade away if the new lighting systems are not well maintained. Train personnel in proper maintenance techniques, including cleaning and relamping.



4. **Remove unnecessary lamps** – Remove unnecessary lamps (de-lamp) in over lit areas to save energy. Check your light levels against standards from the Illuminating Engineering Society (IES) to see if you have areas that are over or under lit.



5. **Train your staff** – Train personnel in proper maintenance techniques, including cleaning and relamping. Annual retraining is also necessary to remind staff of proper procedure and to account for changes in equipment and staff turnover. Retraining is especially important immediately after a lighting upgrade. A variety of training and certification programs are offered by national organizations for the design and maintenance of efficient lighting systems.



6. **Maintain parking lot lighting** – Make sure exterior lights are turned off as soon as daylight is present and reduce or turn off exterior lights during hours when they are no longer needed. Look for “day-burners” that may have failed or have dirty light sensors. Inspect controls to ensure they are operating properly.



7. **Recalibrate lighting controls** – One reason lighting systems may experience a decrease in light output and efficiency over time is due to control systems drifting out of spec or being overridden by occupants. Consider having a lighting controls specialist inspect your systems.

Lighting *(continued)*



8. Adjust occupancy sensor time delay – Reduce the amount of time scheduled for the lights to turn OFF after detection of vacancy to increase energy savings.



9. Inspect lighting controls annually

- Occupancy sensors may become obstructed by a new furniture arrangement, light sensors may require adjustment if interior surfaces are changed to materials with new reflectance values, or a new building may go up next door that changes incoming daylight patterns.
- Maintenance personnel should inspect the lighting controls at least annually to verify proper operation. Some sensors are installed incorrectly and inaccurately detecting occupancy, which can waste energy. For example, sensors in a private office detect motion outside in the halls. If this occurs, be sure to restrict coverage area, reduce sensitivity, and/or specify manual-ON operation.
- Photoelectric controls need occasional cleaning of the photosensitive surface.
- Check that dimmers are installed as specified and that the upper limits set are appropriate for the tasks being performed and the lower limits set do not cause the lamps to flicker.



10. Adjust janitorial practices – Revise janitorial practices to reduce the hours that lights are turned on each day. Consider switching to day-cleaning, which takes place while occupants are in the building and has shown to also reduce complaints.



Refrigeration



1. Clean refrigerator coils – One of the easiest ways to save energy on electricity bills is to clean your evaporator and condenser coils. Get a cleaning brush for a couple of dollars and make a schedule to clean them every 1-3 months.



2. Service walk-ins annually – Have large and walk-in refrigeration systems serviced at least annually. This includes cleaning, refrigerant top off, checking refrigerant charge, lubrication of moving parts, and adjustment of belts. This will help ensure efficient operation and longer equipment life.



3. Clean & inspect door gaskets – Keep all door gaskets clean and functional. If a dollar bill easily slips out when closed between the door's seals after cleaning, it may be time to replace worn gaskets.



4. Don't overstock shelves – If the fridge is stocked more than it is designed to then the efficiency of the cooler will decrease significantly. An appropriately stocked unit will maintain optimum temperatures with minimum energy consumption. Check the load limit of your unit.



5. Save energy during off-hours – Switch off display lighting and anti-sweat heaters during off-hours to save energy. Only turn on anti-sweat heaters when ambient conditions cause condensation on the display doors.



6. Evaluate defrost settings – Use defrost controls with temperature cut-out to avoid unnecessary heating. If you're using electric defrosting, check whether you need it. Natural or off-cycle defrost might be an option.



7. Cover display cases at night – Make use of night blinds and/or strip curtains when premises are closed. Covers such as these can be effective in reducing the load, after hours.



8. Ensure adequate airflow – Refrigeration requires ambient air to cool refrigerant, and it also needs room to let warm air out. Ensure adequate airflow around the unit and the evaporator.



9. Check thermostat settings – If temperature settings in refrigerated systems drift too low, the cases will use more energy than necessary. The most used settings for freezers are between -14°F and -8°F . For refrigerators, they are between 35°F and 38°F . (Source: nrel.gov)



10. Close the doors – One of the most common causes of improper temperature in a refrigerator is that the unit is simply being opened too frequently. Ask your employees to be aware of how long they keep the refrigerator door open.